



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/021,913

12/10/2001

William T. Zaumen

SUN-P6057-ACC

2237

57960

7590

10/31/2006

SUN MICROSYSTEMS INC.
C/O PARK, VAUGHAN & FLEMING LLP
2820 FIFTH STREET
DAVIS, CA 95618-7759

EXAMINER

DUONG, THOMAS

ART UNIT

PAPER NUMBER

2145

DATE MAILED: 10/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/021,913	Applicant(s) ZAUMEN ET AL.	
	Examiner Thomas Duong	Art Unit 2145	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>5/23/03</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 9-16 are rejected under 35 USC § 101 because the claims are not limited to tangible embodiments since *claim 9* is clear intrinsic evidence that the medium in the independent *claim 9* and the dependent *claims 10-16* is intended to cover signals, per se, according to the specification. The specification discloses, "*computer instruction signals embodied in a transmission medium (with or without a carrier wave upon which the signals are modulated)*"; however, this is not a physical article or object required to establish a statutory category of invention as a machine, manufacture, process or composition of matter. As such, the claims are not limited to statutory subject matter and are, therefore, non-statutory. Hence, in order to overcome this 35 USC § 101 rejection, the above claims need to be amended to include only the physical computer media and not a transmission media or other intangible or non-functional media.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 9, 17, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Astle et al. (US20010046372A1) and in view of Pallmann (US006094684A).

5. With regard to claims 1, 9, 17, and 25, Astle discloses,

- *receiving at a multiplexer a first request from a controller to transfer data from the data device to the data terminal; (Astle, pg.1, para.1 – pg.5, para.52)*

Astle discloses, "the transmitting station also includes a control computer system 20 which provides control data on a line 22 to a combiner or multiplexer 22"

(Astle, pg.2, para.15). Hence, Astle teaches of the combiner or multiplexer receiving the user request for streaming data directly from the control computer system, which provides the control data to the combiner or multiplexer.

- *forwarding the first request from the multiplexer to the data device; (Astle, pg.1, para.1 – pg.5, para.52)*

Astle discloses, "the transmitting station also includes a control computer system 20 which provides control data on a line 22 to a combiner or multiplexer 22"

(Astle, pg.2, para.15). Hence, Astle teaches of the combiner or multiplexer receiving the user request for streaming data directly from the control computer system, which provides the control data to the combiner or multiplexer.

- *moving data from the data device to the multiplexer; and (Astle, pg.1, para.1 – pg.5, para.52)*

Astle discloses, "the transmitting station also includes a control computer system 20 which provides control data on a line 22 to a combiner or multiplexer 26 which

receives the encoded broadcast signal from the signal source 12 before application to the transmitter 14" (Astle, pg.2, para.15). In addition, Astle discloses, *"the control data is then combined with the digital television signal 24 from the source in the multiplexer 26 and is transmitted to the user's home from the transmitter 14"* (Astle, pg.2, para.23). Hence, Astle teaches of the combiner or multiplexer directly receiving the encoded broadcast signal from the signal source and transmitting the signal to the requested user.

- *inserting data from the data device into an outgoing data stream, so that data does not have to be copied to the controller for insertion into the outgoing data stream.* (Astle, pg.1, para.1 – pg.5, para.52)

Astle discloses, *"the transmitting station also includes a control computer system 20 which provides control data on a line 22 to a combiner or multiplexer 26 which receives the encoded broadcast signal from the signal source 12 before application to the transmitter 14"* (Astle, pg.2, para.15). In addition, Astle discloses, *"the control data is then combined with the digital television signal 24 from the source in the multiplexer 26 and is transmitted to the user's home from the transmitter 14"* (Astle, pg.2, para.23). Hence, Astle teaches of the combiner or multiplexer directly receiving the encoded broadcast signal from the signal source and transmitting the signal to the requested user.

However, Astle does not explicitly disclose,

- *accepting a first set of parameters from the data device at the multiplexer, wherein the first set of parameters includes a location of data to be transferred;*

Pallmann teaches,

Art Unit: 2145

- *accepting a first set of parameters from the data device at the multiplexer, wherein the first set of parameters includes a location of data to be transferred;* (Pallmann, col.3, lines 46-55; col.13, line 19 – col.14, line 65)

Pallmann discloses, *"the DataSource parameter 508 is used in the [Link] section to specify the name of the file on the data source 104 (without drive, directory, or other account information) from which the data is being retrieved. This parameter specifies the location of the data 108 on the data source 104"*

(Pallmann, col.14, lines 11-15). Hence, Pallmann teaches of the machine 102 receiving from the data source a set of parameter specifying the location of the data to be delivered to the requesting client.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of Pallmann with the teachings of Astle to *"provide a data communication method and apparatus that may be configured by a user to retrieve data from a selected data source and transfer it to a selected data target in a specified manner"* (Pallmann, col.3, lines 52-55).

6. Claims 2-8, 10-16, 18-24, and 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Astle et al. (US20010046372A1), in view of Pallmann (US006094684A), and further in view of Boucher et al. (US006393487B2).

7. With regard to claims 3, 11, 19, and 26, Astle and Pallmann disclose,

- *accepting a second set of parameters from the data device at the multiplexer, wherein the second set of parameters includes a storage location for transferring data to;* (Pallmann, col.3, lines 46-55; col.13, line 19 – col.14, line 65)

Pallmann discloses, *"the DataSource parameter 508 is used in the [Link] section to specify the name of the file on the data source 104 (without drive, directory, or other account information) from which the data is being retrieved. This parameter specifies the location of the data 108 on the data source 104"*

(Pallmann, col.14, lines 11-15). Hence, Pallmann teaches of the machine 102 receiving from the data source a set of parameter specifying the location of the data to be delivered to the requesting client.

However, Astle and Pallmann do not explicitly disclose,

- *receiving at the multiplexer a second request to transfer data from the data terminal to the data device;*
- *forwarding the second request from the multiplexer to the data device;*
- *recovering data from an incoming data stream; and*
- *moving data recovered from the incoming data stream to the data device, so that data does not have to be copied to the controller from the incoming data stream.*

Boucher teaches,

- *receiving at the multiplexer a second request to transfer data from the data terminal to the data device; (Boucher, col.3, line 46- col.4, line 14; col.7, line 35 – col.10, line 30)*

Boucher discloses, *"the accelerated processing includes employing representative control instructions for a given message that allow data from the message to be processed via a fast-path which accesses message data directly at its source or delivers it directly to its intended destination. This fast-path bypasses conventional protocol processing of headers that accompany the data. The fast-path employs a specialized microprocessor designed for processing*

network communication, avoiding the delays and pitfalls of conventional software layer processing, such as repeated copying and interrupts to the CPU" (Boucher, col.3, line 61 col.4, line 4). In addition, Boucher discloses, *"this accelerated processing is provided to a host for both transmitting and receiving data, and so improves performance whether one or both hosts involved in an exchange of information have such a feature"* (Boucher, col.3, lines 56-60). Hence, Boucher teaches of a method of data communication in a network wherein a fast-path (i.e., direct) transfer of data from the source to the destination is disclosed.

- *forwarding the second request from the multiplexer to the data device;* (Boucher, col.3, line 46- col.4, line 14; col.7, line 35 – col.10, line 30)
- *recovering data from an incoming data stream; and* (Boucher, col.3, line 46- col.4, line 14; col.7, line 35 – col.10, line 30)
- *moving data recovered from the incoming data stream to the data device, so that data does not have to be copied to the controller from the incoming data stream.* (Boucher, col.3, line 46- col.4, line 14; col.7, line 35 – col.10, line 30)

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of Boucher with the teachings of Astle and Pallmann to provide a network *"communication that greatly increases the speed of that processing and the efficiency of moving the data being communicated"* (Boucher, col.3, lines 47-49) and that *"this accelerated processing is provided to a host for both transmitting and receiving data, and so improves performance whether one or both hosts involved in an exchange of information have such a feature"* (Boucher, col.3, lines 56-60).

Art Unit: 2145

8. With regard to claims 2, 4, 10, 12, 18, 20, and 27, Astle, Pallmann, and Boucher disclose,

- *wherein a transmission protocol for the outgoing data stream includes one of transmission control protocol and user datagram protocol.* (Astle, pg.1, para.1 – pg.5, para.52; Pallmann, col.3, lines 46-55; col.8, line 30 – col.10, line 10; col.13, line 19 – col.14, line 65; Boucher, col.3, line 46- col.4, line 14; col.7, line 35 – col.10, line 30)

9. With regard to claims 5, 13, 21, and 28, Astle, Pallmann, and Boucher disclose,

- *wherein the data device includes one of a hard disk, a floppy disk, a tape drive, a compact disk, a digital versatile disk, a digital video disk, a web camera, and a streaming data source.* (Astle, pg.1, para.1 – pg.5, para.52; Pallmann, col.3, lines 46-55; col.8, line 30 – col.10, line 10; col.13, line 19 – col.14, line 65; Boucher, col.3, line 46- col.4, line 14; col.7, line 35 – col.10, line 30)

10. With regard to claims 6-8, 14-16, and 22-24, Astle, Pallmann, and Boucher disclose,

- *wherein the data device comprises a component associated with a computer kernel process.* (Astle, pg.1, para.1 – pg.5, para.52; Pallmann, col.3, lines 46-55; col.8, line 30 – col.10, line 10; col.13, line 19 – col.14, line 65; Boucher, col.3, line 46- col.4, line 14; col.7, line 35 – col.10, line 30)
- *wherein the data device comprises a component associated with a computer application program.* (Astle, pg.1, para.1 – pg.5, para.52; Pallmann, col.3, lines 46-55; col.8, line 30 – col.10, line 10; col.13, line 19 – col.14, line 65; Boucher, col.3, line 46- col.4, line 14; col.7, line 35 – col.10, line 30)

Art Unit: 2145


- *wherein the data device comprises a data source component separate from a computer system.* (Astle, pg.1, para.1 – pg.5, para.52; Pallmann, col.3, lines 46-55; col.8, line 30 – col.10, line 10; col.13, line 19 – col.14, line 65; Boucher, col.3, line 46- col.4, line 14; col.7, line 35 – col.10, line 30)

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas Duong whose telephone number is 571/272-3911. The examiner can normally be reached on M-F 7:30AM - 4:00PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason D. Cardone can be reached on 571/272-3933. The fax phone numbers for the organization where this application or proceeding is assigned are 571/273-8300 for regular communications and 571/273-8300 for After Final communications.

Thomas Duong (AU2145)

October 28, 2006

A handwritten signature in black ink, appearing to read 'Jason D. Cardone', written over a horizontal line.

Jason D. Cardone

Supervisory PE (AU2145)